REMARKS

Applicants' representative wishes to thank Examiner Kading for the courtesies extended during a recent telephone interview concerning amendments to the claims as shown above, the differences between the amended claims and the applied art, and results of a preliminary search for art related to the amended claims.

In the Final Office Action dated September 8, 2004, the Examiner noted that claims 1-39 are pending in the application, and that claims 1-39 are rejected under one or more of the following statutory sections: 35 U.S.C. §112 and 35 U.S.C. §103.

By this response accompanying the Request for Continued Examination, Applicants have amended claims 1, 8, 11, 19, 23, 32, and 35. Particularly, claims 1, 11, 23, 32, and 35 have been amended to clarify the functionality of the subscriber device of the claim and claims 8, 19, and 32 have been amended to clarify a feature of Applicants' invention previously called "a switch".

In view of the above amendments and the following discussion, Applicants submit that the claims pending in the application are believed to be definite under 35 U.S.C. §112, novel under 35 U.S.C. §102, and nonobvious under 35 U.S.C. § 103. Thus, Applicants believe that the application is in condition for allowance.

I. REJECTION OF CLAIMS UNDER 35 U.S.C. §112

Claims 32, 33, and 34 have been rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter that Applicants regard as their invention. Specifically, the Examiner has stated that it is unclear how a switch can convert data packets to circuit switched traffic as switches only route and direct data to a destination and do not manipulate or process the data. Applicants have the claims to overcome this rejection.

Claim 32 now calls for means for converting data packets to circuit switched traffic and vice versa. This amendment is proper and justified and introduces no new matter.

In light of the remarks presented above, claim 32 is believed to be clear and definite. Since claims 33 and 34 depend from claim 32, claims 33 and 34 are also

believed to be clear and definite. It is respectfully submitted that claims 32, 33, and 34 are allowable under 35 U.S.C. §112.

II. REJECTION OF CLAIMS UNDER 35 U.S.C. §103(a)

A. Rejection over Hamalainen in view of Valentine

Claims 1-8, 11-19, 23-28 and 35-39 stand rejected as being unpatentable over U.S. Patent 5,802,465 issued to Hamalainen et al. (hereinafter "Hamalainen") in view of U.S. Patent 6,363,253 issued to Valentine et al. (hereinafter "Valentine"). In view of the amendments to the claims, this rejection is respectfully traversed.

Hamalainen teaches a wireless network capable of data transfer. Generally, the wireless network carries speech and signaling or control information over its various channels. Speech is generally carried over the traffic channels and signaling or control information is carried over the control channels. *See Hamalainen, FIG. 2.* According to Hamalainen, it is possible to send packet data over the channels reserved for speech or over the channels reserved for control and signaling information. *See Hamalainen patent, cols. 7 and 8.*

Hamalainen fails to teach, show, or suggest a system wherein the speech or voice data travel from the subscriber device over a different communication network from the signaling or control data as claimed by Applicants. In the Hamalainen system, both the traffic channels that are intended for speech or voice data and the control channels that are intended for control or signaling data exist as different wireless channels allocated between the mobile subscriber and the mobile base station. Although the channels may be different, the communication network remains the same for those channels. Information such as speech or packet data carried in the traffic channels travels over a wireless network, the very same wireless network that carries the information in the control channels. There is no appreciation by Hamalainen that the speech or packet information can be sent from the subscriber device over one network such as a packet network, for example, while simultaneously sending the control or signaling information from the subscriber device over a different network such as a wireless network. This crucial point of distinction between Hamalainen and Applicants'

claimed invention is recognized by the Examiner in the present Office Action at page 3, line 6.

Valentine presents a wireless system in which call setup is accomplished over the traditional wireless network elements, while the subsequent handling of voice and data traffic is handled over an IP network that is part of the wireless system. In fact, Valentine's system sends and receives all information, whether it is signaling data or voice traffic, over the same wireless network link connecting the end user at mobile station 20 to the cell site at base transceiver station 24. As a result, Valentine transmits and receives signaling data and voice information from the subscriber device over the same network. That is, Valentine sends both the voice and call setup information from the subscriber device (mobile station (MS) 20) over the same wireless network, an air interface between the mobile station and the base transceiver station. This is clearly not what Applicants have claimed.

Valentine fails to teach, show, or suggest a system wherein the speech or voice data travel from the subscriber device over a different communication network from the signaling or control data transmitted by the subscriber device, as claimed by Applicants. Although the remaining networks and network paths beyond the base transceiver station (element 24) may be different in Valentine, the communication network traversed from the subscriber device (element 20) and the base transceiver station (element 24) remains the same for both the voice information and the signaling data. Valentine does not even remotely teach, show, or suggest that the voice information can be sent over one network, while simultaneously sending the control or signaling information over a completely different network. This is a critical point of distinction between Valentine and Applicants' claimed invention.

In the present Office Action, it is suggested that the teachings of the Hamalainen and Valentine references be combined. The motivation offered for making such a combination is said to be "that having a dedicated network for call setup saves resources and doesn't tie up traffic." This motivation is not common to both references. No common motivation is not found expressly or implicitly in the references at hand. Lacking any motivation to combine these teachings stated within the four corners of one

or the other reference, it can only be deduced that hindsight is motivating the suggested combination in view of Applicants' own teachings. Such hindsight, using Applicants' own teachings against themselves in order to make the suggested combination of references, is impermissible and cannot be employed here for any purpose.

It should be noted that there is a discussion of avoiding unnecessarily tying up circuits in Valentine at col. 4, lines 52-55. But, this statement does not refer to any benefit flowing from having a separate network. Instead, it refers to another feature of Valentine, namely, having the call setup information indexed and stored in a network cache after a first call is made to a called party so that the information can be recalled from memory and reused when the calling party wants to reestablish a call to the same called party. Thus, Valentine cannot be said to motivate the combination of references.

But even assuming *arguendo* that the references could be properly combined, a premise with which Applicants disagree, the resulting combination would still lack the unique features of Applicants' claimed invention. That is, the combination would lack any teaching that the signaling data and voice data should be carried from the subscriber device by different communication networks. As shown above, Hamalainen and Valentine each send the signaling data and the voice information from the subscriber device over the same wireless network. Applicants claim an invention in which voice data and signaling data for a particular call are bifurcated at the subscriber device and then transmitted from the subscriber device over different communication networks. In support of the claimed invention, Applicants have described many examples in the specification showing a signaling path established from the subscriber device over a wireless network while the voice path is established from the subscriber device over a different network such as a packet network.

Neither Hamalainen nor Valentine, separately or in combination, teach, show, or suggest "identifying at a subscriber device, for each communication link to be established, respective signaling data and voice data; and transmitting from the subscriber device said signaling data via a first network and said voice data via a second network, wherein the first network is different from the second network", as

stated in amended claim 1. Claims 2 through 8 depend directly and indirectly from claim 1 and include all the limitations of the base claim.

For all the reasons set forth above, it is submitted that Applicants' claimed invention defined in claims 1 through 8 would not have been obvious to a person skilled in the art upon a reading of the Hamalainen and Valentine references at the time the invention was made. Therefore, Applicants believe that claims 1 through 8 are allowable under 35 U.S.C. §103.

Neither Hamalainen nor Valentine, separately or in combination, teach, show, or suggest "segregating at a subscriber device signaling traffic and related voice traffic ... and transmitting from the subscriber device said voice traffic via said communications link established by a controller, said voice traffic and said signaling traffic being carried via different communication networks", as stated in claim 11. Claims 12 through 19 depend directly and indirectly from claim 11 and include all the limitations of the base claim.

For all the reasons set forth above, it is submitted that Applicants' claimed invention defined in claims 11 through 19 would not have been obvious to a person skilled in the art upon a reading of the Hamalainen and Valentine references at the time the invention was made. Therefore, Applicants believe that claims 11 through 19 are allowable under 35 U.S.C. §103.

Neither Hamalainen nor Valentine, separately or in combination, teach, show, or suggest "establishing a signaling link from the subscriber device to a switch via a first transport network and establishing a voice path from the subscriber device to said switch via a second transport network responsive to a determination that said called party answers, said first transport network being different from said second transport network", as stated in claim 23. Instead, Hamalainen and Valentine transmit both signaling data and voice data over the same wireless network from the calling party.

In Valentine, the call setup information traverses a path to the switch at MSC14, but goes no farther. But the path traversed by the voice information does not intersect that switch or any other point along the signaling data path in any manner. Thus,

Valentine fails to meet another of Applicants' claimed limitations, namely, establishing a voice path through the same switch as the signaling link.

For all the reasons set forth above, it is submitted that Applicants' claimed invention defined in claim 23 and claims 24-28, directly and indirectly dependent from claim 23 and including all the limitations of claim 23, would not have been obvious to a person skilled in the art upon a reading of the Hamalainen and Valentine references at the time the invention was made. Therefore, Applicants believe that claims 23 through 28 are allowable under 35 U.S.C. §103.

Neither Hamalainen nor Valentine, separately or in combination, teach, show, or suggest a computer readable medium that causes a computer to perform "segregating at a subscriber device signaling traffic and related voice traffic ... and transmitting from the subscriber device said voice traffic via said communications link established by a controller, said voice traffic and said signaling traffic being carried via different communication networks", as stated in claim 35. Claims 36 through 39 depend directly and indirectly from claim 35 and include all the limitations of base claim 35.

For all the reasons set forth above, it is submitted that Applicants' claimed invention defined in claims 35 through 39 would not have been obvious to a person skilled in the art upon a reading of the Hamalainen and Valentine references at the time the invention was made. Therefore, Applicants believe that claims 35 through 39 are allowable under 35 U.S.C. §103.

B. Rejection over Hamalainen and Valentine further in view of Kung

The Examiner has rejected claims 9, 10, 20, 21, 30 and 31 as being unpatentable over Hamalainen and Valentine further in view of U.S. Patent 6,252,952 to Kung (hereinafter referred to as "Kung"). This rejection is respectfully traversed.

Claims 9-10 depend from independent claim 1; claims 20-21 depend from independent claim 11; and claims 30-31 depend from independent claim 23. The differences between Applicants' invention, as defined in the independent base claims, and the prior art references of Hamalainen and Valentine has already been described above in Section II.A of the Remarks and will not be repeated herein for the sake of

brevity. But those remarks are understood to apply with equal weight herein in describing the differences between the rejected dependent claims and the prior art references.

Kung teaches a system that, in pertinent part, allows a multiplicity of premises equipment to communicate with a broadband network. The premises equipment interface with a broadband residential gateway to allow transmission into a hybrid fiber/coax (HFC) plant. The residential gateway provides the conversion of input signals into appropriate output signals suitable for use over the HFC via transceiver element 302. *See Kung patent, col. 18, lines 15 – 23.* Contrary to the Examiner's assertion, wireless interface 345 allow wireless devices within the customer premises to communicate with the residential gateway. The wireless interface 345 does **not** allow wireless device to connect to with a wireless network. *See Kung patent, col. 17, lines 41 – 44.* Kung fails to provide for any segregation of voice and signaling information within the residential gateway or subscriber devices on the customer premises side of the gateway. Kung also fails to teach the transmission of voice and signaling information from the subscriber device over different communication networks. In Kung, all transmissions to and from the customer premises take place via the hybrid fiber/coax plant.

The addition of Kung to the combination of Hamalainen and Valentine still fails to produce a set of elements that even remotely resembles Applicants' claimed invention, because the combination of references still does not teach the transmission of voice and signaling traffic from the subscriber device over different communication networks. This limitation is present in Applicants' independent base claims and is therefore fully included in claims 9, 10, 20, 21, 30, and 31.

In the present Office Action, the Examiner expressly admits that neither Hamalainen nor Valentine teach the claimed limitations for Applicants' Media Terminal Adapter – Cellular Transceiver in either its integrated form (claims 9, 20, and 30) or its non-integrated form (claims 10, 21, and 31). Kung has been added to the Valentine and Hamalainen combination in order to provide the missing MTA-CT functionality. But, as described already above, Kung does not even have the requisite CT portion that

performs the "transmitting" or "establishing" steps of Applicants' method. Kung's wireless interface 345 does not provide any transmission or link establishment function with a wireless communication network or its related base station, as claimed and described by Applicants. Instead, Kung's wireless interface deals with the problems of communicating between the residential gateway and the variety of customer premises equipment, all on the customer premises, before the information is transmitted over the HFC plant. That is, the wireless customer premises equipment communicates with the wireless interface 345 so that its entire, non-segregated, wireless communication stream can be converted into an appropriate format for transmission over a wired link, a link from the interface to the gateway and presumably beyond.

For all the reasons set forth above, it is submitted that Applicants' claimed invention defined in claims 9, 10, 20, 21, 30, and 31 would not have been obvious to a person skilled in the art upon a reading of the Hamalainen, Valentine, and Kung references at the time the invention was made. Therefore, Applicants believe that claims 9, 10, 20, 21, 30, and 31 are allowable under 35 U.S.C. §103.

C. Rejection over Hamalainen and Valentine further in view of Jachowski

The Examiner has rejected claims 22 and 29 as being unpatentable over Hamalainen and Valentine further in view of U.S. Patent 4,726,071 to Jachowski (hereinafter referred to as "Jachowski"). This rejection is respectfully traversed.

Claims 22 and 29 depend from independent claims 11 and 23, respectively. The differences between Applicants' invention, as defined in the independent base claims, and the prior art references of Hamalainen and Valentine has already been described above in Section II.A of the Remarks and will not be repeated herein for the sake of brevity. But those remarks are understood to apply with equal weight herein in describing the differences between the rejected dependent claims and the prior art references.

Both claim 22 and claim 29 define the additional step of switching the voice traffic back to the same communication network carrying the signaling traffic, when loss of

local power is detected. The Examiner has expressly admitted that neither Hamalainen nor Valentine disclose this step.

Jachowski has been added to the combined references of Hamalainen and Valentine in order to overcome the above-identified deficiency in the teachings of Hamalainen and Valentine. Jachowski discloses a need to easily tune a resonant cavity in a wireless system to another frequency if, for example, a channel becomes inoperative. Thus, Jachowski teaches that the particular channel be kept on the same network as the other channels, just switched to a different frequency. There is no teaching in Jachowski that, when a channel on one network becomes inoperative, the information on the inoperative channel will be switched to a different network as claimed by Applicants. Just as with Hamalainen and Valentine, there is no teaching in Jachowski about transmission of voice and signaling information from the subscriber device over separate networks. Thus, Jachowski cannot be read as curing the insufficient teachings of Hamalainen and Valentine as related to Applicants' claimed invention.

In light of the reasons given above, it is respectfully submitted that Applicants' invention as defined by claims 22 and 29 would not have been obvious to a person of ordinary skill in the art upon a reading of the references of Hamalainen, Valentine and Jachowski, separately or in combination, at the time Applicants' invention was made. Therefore, it is believed that claims 22 and 29 are allowable under 35 U.S.C. §103.

IV. SUPPLEMENTAL PRIOR ART IDENTIFIED BY EXAMINER

As mentioned above, the Examiner graciously performed an additional search of the prior art on the basis on the amendments to the claims presented during the interview and made above. That search, understood to be non-exhaustive, uncovered U.S. Patent 6,272,325 issued to Wiedeman et al. (hereinafter referenced as "Wiedeman"). Applicants have cited this reference in an Information Disclosure Statement accompanying the Request for Continued Examination filed on even date herewith.

Wiedeman shows a system that includes terrestrial, satellite and wireless (cellular) communication networks. The system is designed and controlled to protect users from excessive exposure to RF energy. The system can monitor cumulative RF exposure from a number of sources such as wireless communication and satellite communication and then terminate of refuse service when a user threshold is exceeded. Wiedeman's user terminals have a dual use capability, namely, communicating with satellites or with terrestrial cellular networks. But Wiedeman fails to teach that this user terminal communicates over the different networks simultaneously by segregating voice and data traffic and transmitting the segregated streams over the separate networks as taught and claimed by Applicants.

In light of the review of this reference by Applicants' representative and the brief remarks above, it is believed that Applicants' claimed invention would not have been obvious to one having ordinary skill in the art upon a reading of cited reference of Wiedeman, separately or in combination with the applied references, at the time Applicants' invention was made. Therefore, it is submitted that the claims as presented are allowable over the Wiedeman reference.

CONCLUSION

In view of the foregoing amendments and remarks, Applicants respectfully submit that this application is in condition for allowance. Entry of this amendment, reconsideration, and allowance are respectfully solicited.

If, however, the Examiner believes that there are any unresolved issues requiring adverse final action in any of the claims now pending in the application, it is requested that the Examiner telephone Mr. Gregory C. Ranieri, Esq. at (732) 383-1394 so that appropriate arrangements can be made for resolving such issues as expeditiously as possible.

Respectfully submitted,

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